

ABSTRACT OF THE DISCLOSURE

An integrated Low Dropout (LDO) linear voltage regulator provides improved current limiting. A differential voltage amplifier compares an output voltage to reference voltage and controls a pass transistor to make the output voltage substantially match the reference voltage.

This is accomplished by sensing the output voltage of the voltage regulator for application to a

- 5 first input of the differential amplifier and coupling a second input of the differential amplifier to the reference voltage. A current sense transistor utilizes current mirroring techniques to sense the current passing through the pass transistor to the output. This sensed current is compared to a reference current. The result of that comparison is fed back to the differential voltage amplifier to in a manner that increases the apparently sensed output voltage in situations where the sensed
- 10 current exceeds the reference current.